Claim 19 (new) A memory for storing a signal encoded by one of four voltage levels comprising;

an input for receiving said encoded signals,

storage circuitry for latching said encoded signals,

decode circuitry for decoding said latched encoded signal into a pair of digital signal representations, and;

circuitry for performing a Boolean logic operation on said pair of digital signal representations.

Claim 20 (new) A memory for storing any one of four voltage level input signals comprising:

a first input for receiving said voltage level input signals,

a second input for receiving a clock signal,

voltage level latching circuitry coupled to the first and second inputs and responsive to a clock signal applied to the second input to latch a voltage level applied to the first input, and;

circuitry coupled to said voltage level latching circuitry for performing a Boolean logic operation on said latched voltage level.